

REMARKS

In the Office Action dated December 16, 2003, certain claims were objected to; claims 1-6, 15, 21-25, 27-30 and 35-37 were rejected under 35 U.S.C. § 102 over U.S. Patent No. 6,256,621 (Tsuchida); claims 7-14, 16-20, 31-34, and 38-42 were rejected under § 103 over Tsuchida in view of U.S. Patent No. 5,692,182 (Desai)¹; and claim 26 was rejected under § 103 over Tsuchida in view of U.S. Patent No. 6,363,387 (Ponnekanti).

OBJECTIONS TO THE CLAIMS

The claims have been amended to overcome the objections. Note that the amendments to claims 7, 21, 25, and 42 are directed to the form of the claims and thus do not change the scope of each respective claim.

REJECTIONS UNDER 35 U.S.C. §§ 102 AND 103

Applicant respectfully submits that Tsuchida does not disclose the subject matter of claim 1, as Tsuchida does not teach executing a *plurality* of *multi-phase* parallel tasks in response to a request to perform data operations upon data in a database. The Office Action cited to column 6, lines 39-62, and Figure 4, of Tsuchida as disclosing the executing act of claim 1. The cited passage refers to a parallel pipeline operation that can be performed in a database management system of Tsuchida. As depicted in Figure 4, three phases are illustrated: a retrieval phase, a merge phase, and a joining phase. As shown in Figure 4 of Tsuchida, reference numerals 100 and 101 indicate processing parts consisting of the data retrieval process and data distribution process. Tsuchida, 6:42-44. Reference numerals 110 and 111 indicate processing parts consisting of the slot sorting process, N-way merge process, and join process. Tsuchida, 6:45-48. Reference numeral 120 indicates a data output process. Tsuchida, 6:49-51.

¹ Paragraph 5 of the Office Action (on page 11) actually stated that these claims were rejected under § 103 over Tsuchida in view of Lawlor in view of the Desai. However, it appears that the reference to Lawlor was a clerical mistake, as no patent number was provided for Lawlor either in the Office Action text or in the Notice of References Cited (PTO-892). Therefore, Applicant is responding to this rejection as being under § 103 over Tsuchida in view of Desai.

In Tsuchida, the processing parts 100 and 101 (relating to data retrieval and distribution) are performed in one phase (retrieval phase), which the processing part 120 is also performed in one phase (joining phase). Only processing parts 110 and 111 are performed in multiple phases (retrieval phase, merge phase, and joining phase). In other words, the data retrieval and distribution task is performed entirely within the retrieval phase, and the data output task is performed entirely within the joining phase. This is indicated even more clearly in Figure 5 of Tsuchida, where data retrieval and distribution of data in tables T1 and T2 stop prior to a line 180 representing the end of the retrieval phase. Similarly, the data output process does not start until *after* the time indicated by a line 181 that corresponds to the start of the joining phase. Therefore, as taught by Tsuchida, there is only one multi-phase task, not a plurality of multi-phase parallel tasks, as recited in claim 1. Therefore, claim 1 is not disclosed by Tsuchida.

Independent claim 15 is also not disclosed by Tsuchida, since Tsuchida does not teach a controller to perform a number of tasks in parallel based upon instructions received from a processor, where *each* of the tasks is performed in a plurality of phases.²

With respect to independent claim 35, Tsuchida does not disclose executing a *plurality* of synchronized *multi-phase* parallel tasks.

Independent claim 22 is also allowable over Tsuchida, as Tsuchida fails to disclose a client system *separate* from the database system and coupled to the data system over a network, where the client system is able to establish a plural sessions with the database system to implement a plurality of data operations upon the database system in parallel. Figures 1-3 of Tsuchida disclose components of a database management system (*see* column 3, lines 55-61). The Office Action stated that the database management system "is a client system in the sense that it handles requests from the application program and performs data operations upon the database." 12/16/2003 Office Action at 6. However, Applicant has made clear that the client system is separate from the database system, and is coupled to the database system over a network. That cannot be satisfied by Tsuchida.

² Although claim 15 has been amended, the scope of the claim is unchanged. The term "number of tasks" was replaced with "plurality of tasks" to clarify the meaning of original claim 15, namely that there are plural tasks.

Independent claim 28 is also allowable over Tsuchida, as Tsuchida fails to disclose a client system to execute a plurality of parallel tasks in response to a request to perform data operations upon data in a database system *over a network connection*, where the client system is separate from the database system.

In view of the erroneous application of Tsuchida to the base claims, it is respectfully submitted that the obviousness rejection of dependent claims over Tsuchida and Desai is also in error and should be withdrawn.

Moreover, the Office Action is in error when it identifies processing of plural rows (shown in Figure 9 of Desai) as being separate phases. There is absolutely no indication that that is the case. In fact, Applicant respectfully submits that the processing of multiple rows as performed in Figure 9 of Desai is processing within one phase. To the extent that the Office Action asserts that processing of plural rows is equivalent to processing in multiple phases, Applicant notes that that assertion is inconsistent with what is taught in Tsuchida, where the retrieval and distribution of data in tables T1 and T2 (note that tables T1 and T2 each have multiple rows) are considered to be within the one phase. Also, note that an N-way merge process and a join process are considered to be performed within a single phase, although each process involves multiple rows. Therefore, the Office Action has engaged in inconsistent readings of disparate portions of different references in its attempt to reject the claims as being obvious over Tsuchida and Desai. A *prima facie* case of obviousness over Tsuchida and Desai has thus not been established with respect to the dependent claims.

Claim 26 has been cancelled to render the rejection of that claim over Tsuchida and Ponnekanti moot.

In view of the foregoing, all claims are in condition for allowance, which action is respectfully requested. The Commissioner is authorized to charge any additional fees, including extension of time fees, and/or credit any overpayment to Deposit Account No. 50-1673 (9433).

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